

PATENT



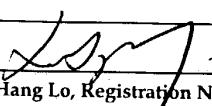
IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

14

APPLICANTS: Millard E. Sweatt III, et al.  
SERIAL NO.: 09/925,109  
FILING DATE: August 8, 2001  
TITLE: Method & System for Remote Television Replay Control  
EXAMINER: Unknown  
GROUP ART UNIT: Unknown  
ATTY. DKT. NO.: 22407-03951

**CERTIFICATE OF MAILING**

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Signature: 

Typed or Printed Name: Sze-Hang Lo, Registration No. 48,388

Dated: Nov. 9, 2001

ASSISTANT COMMISSIONER FOR PATENTS  
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WASHINGTON, D.C. 20231

**LETTER TO THE CHIEF DRAFTSPERSON**

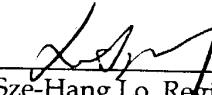
SIR:

Please substitute the enclosed 34 sheets of formal drawings containing Figures 1- 31 for the 31 sheets of drawings containing Figures 1-31 previously submitted.

Respectfully submitted,

MILLARD E. SWEATT III, ET AL.

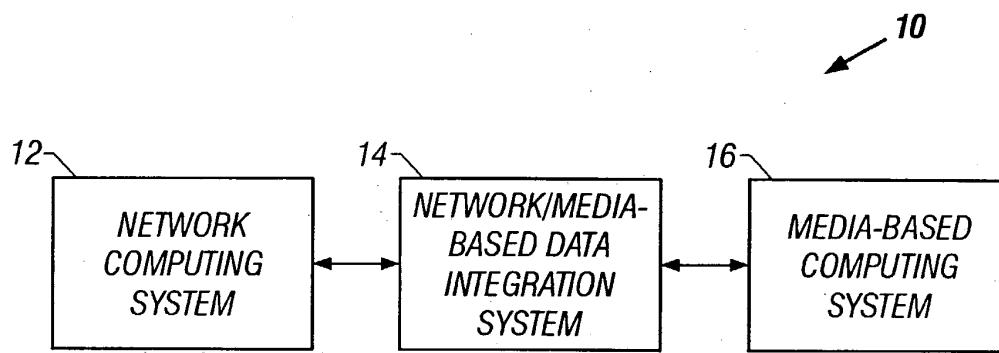
Dated: November 9, 2001

By: 

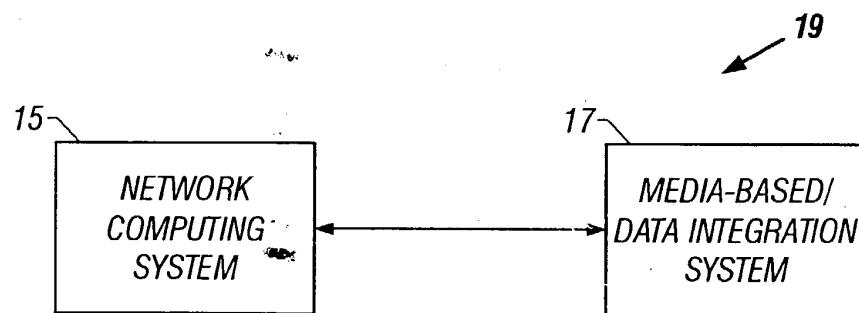
Sze-Hang Lo, Registration No. 48,388  
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22407/05391/SF/5062447.1

20126/02234/908623 V



**FIG. 1A**



**FIG. 1B**

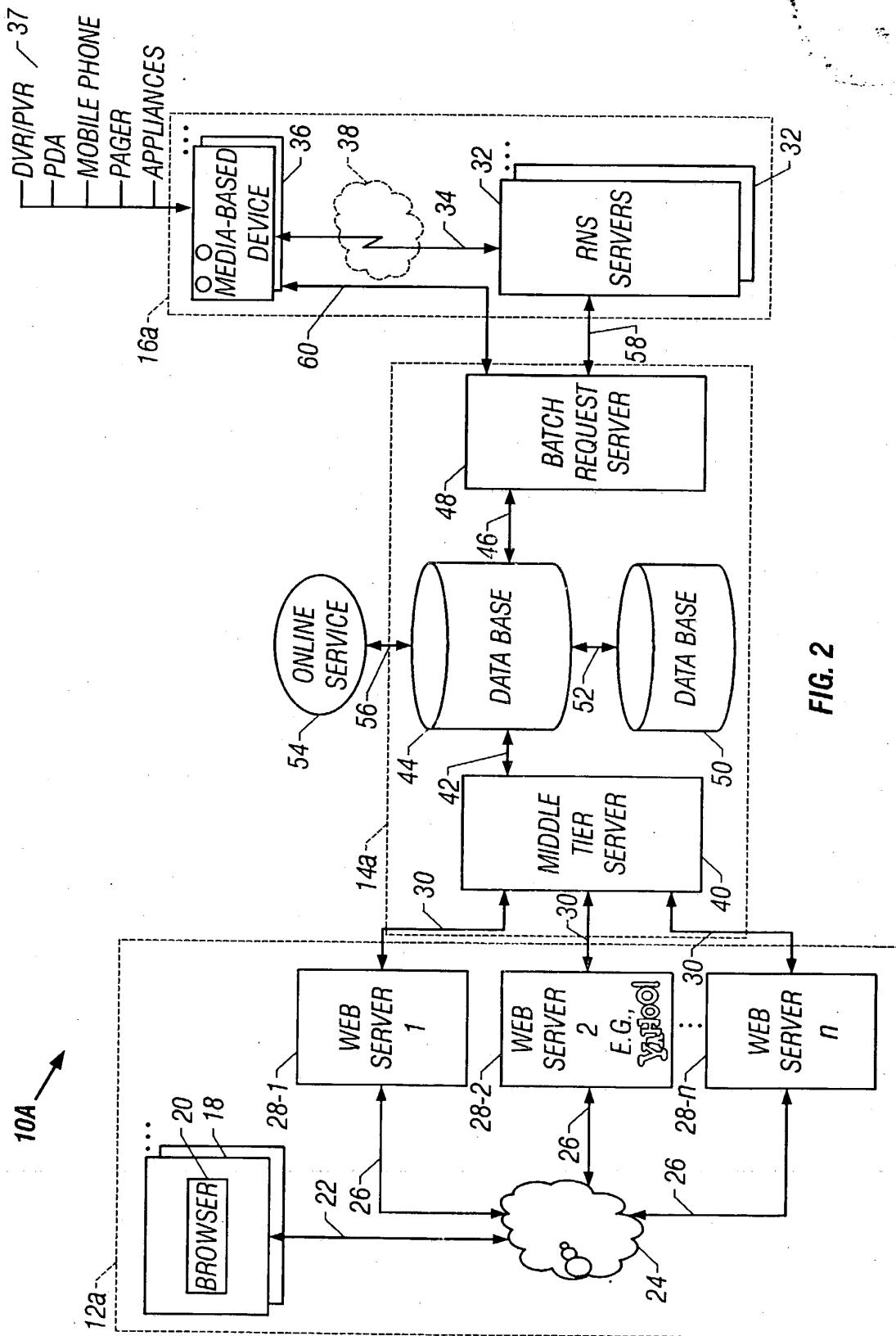


FIG. 2

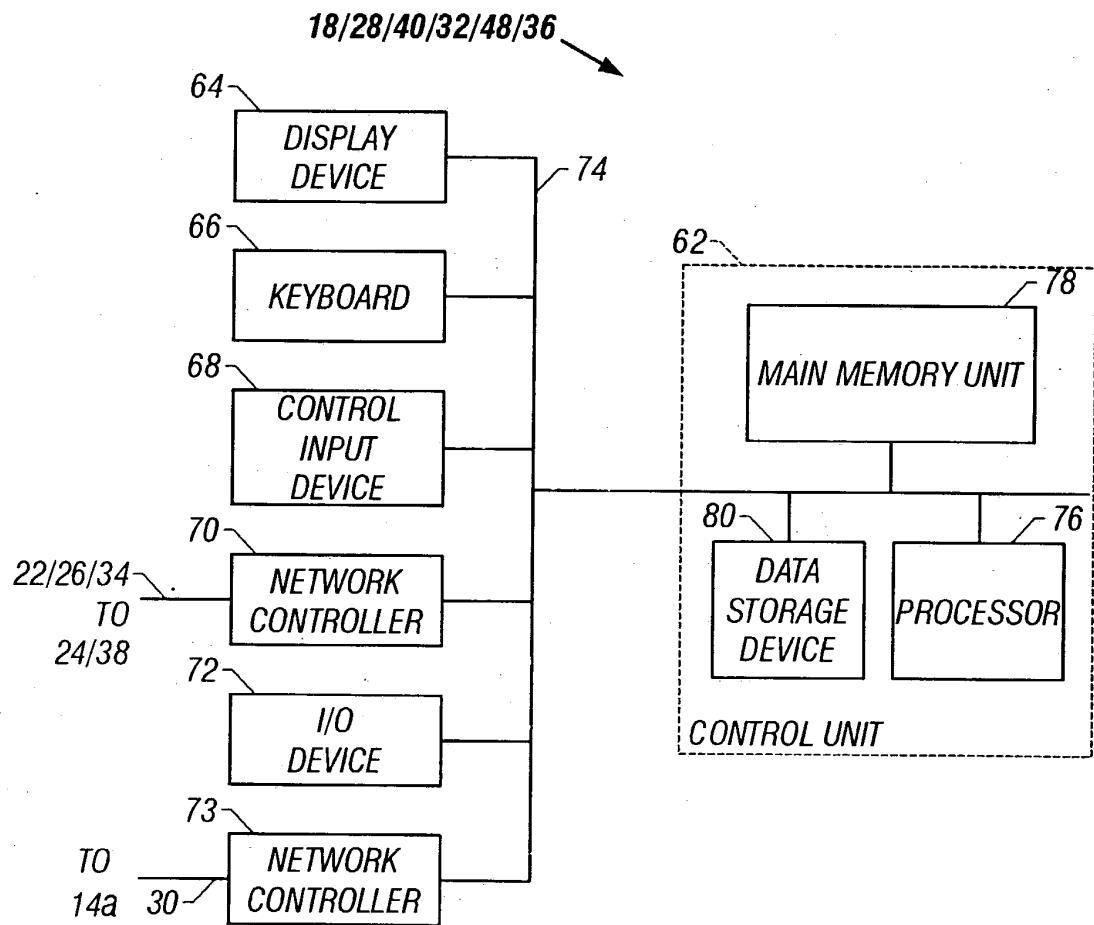


FIG. 3

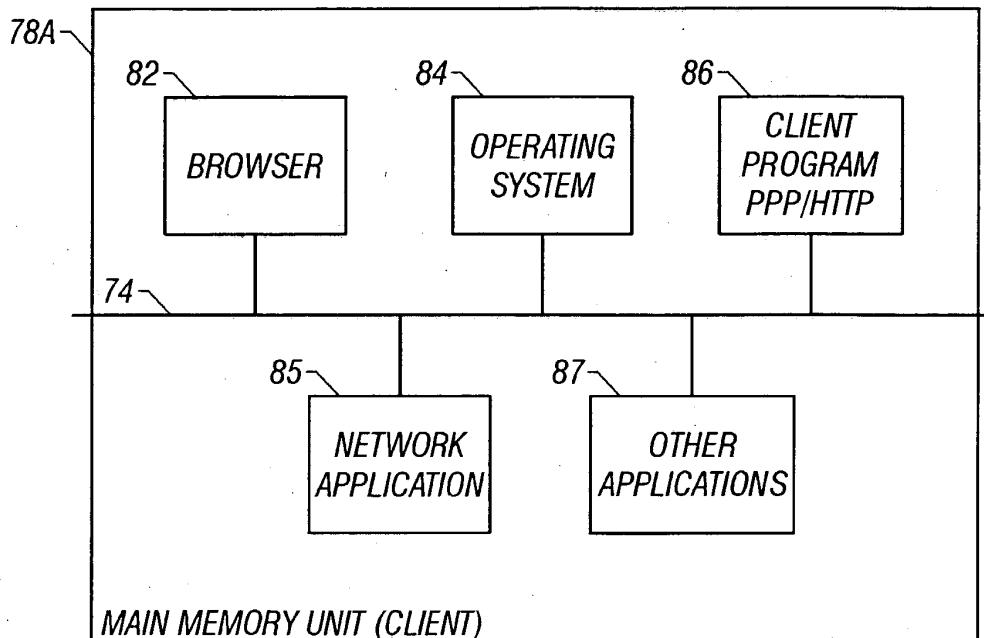


FIG. 4A

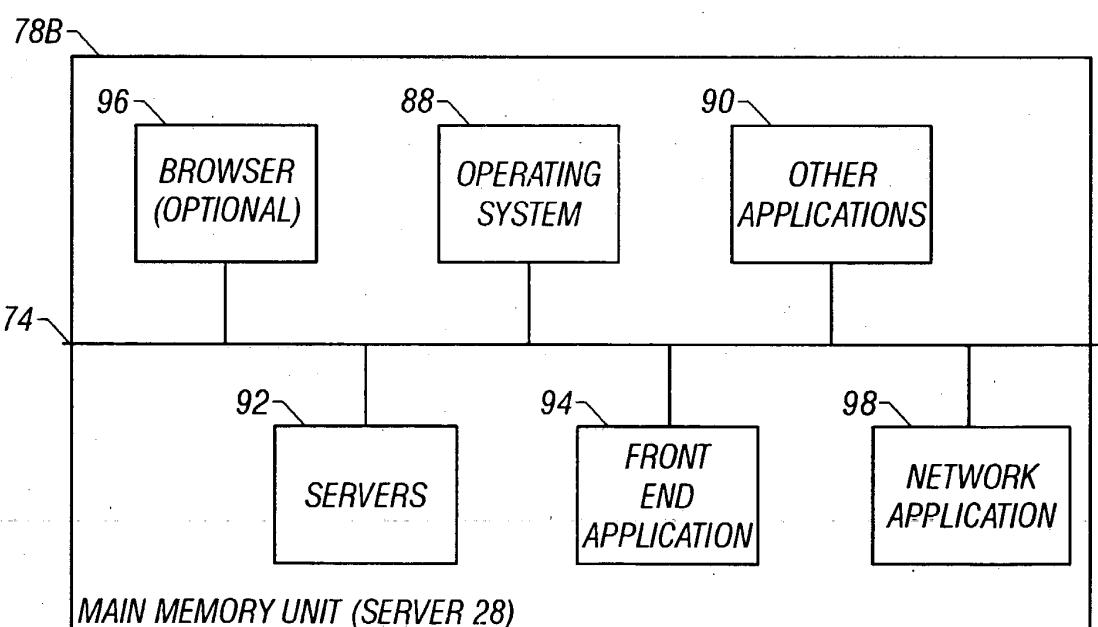


FIG. 4B

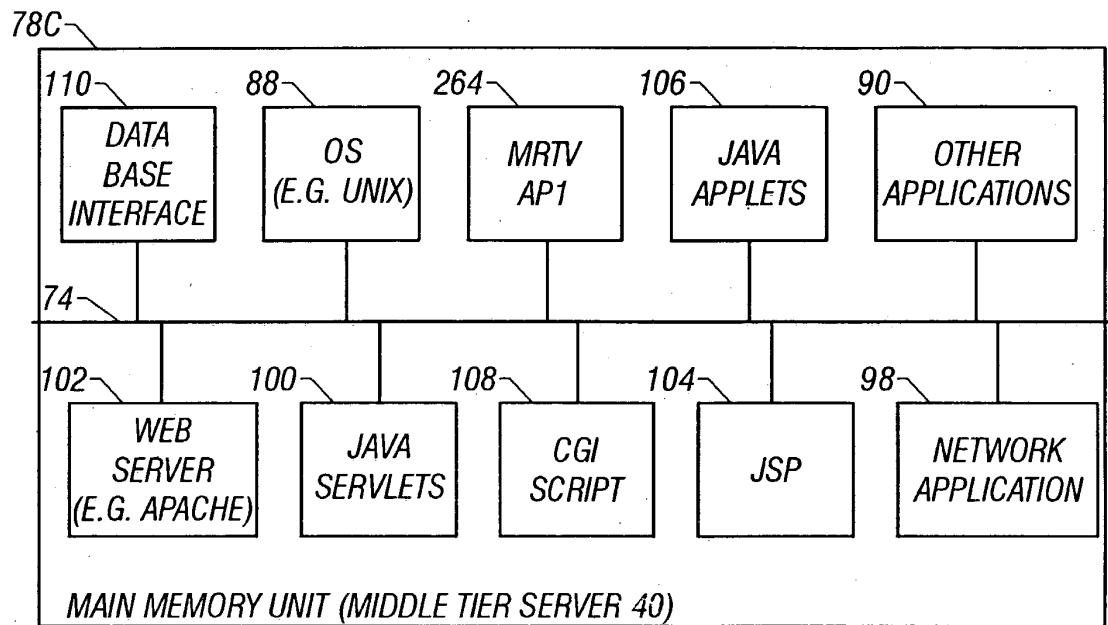


FIG. 4C

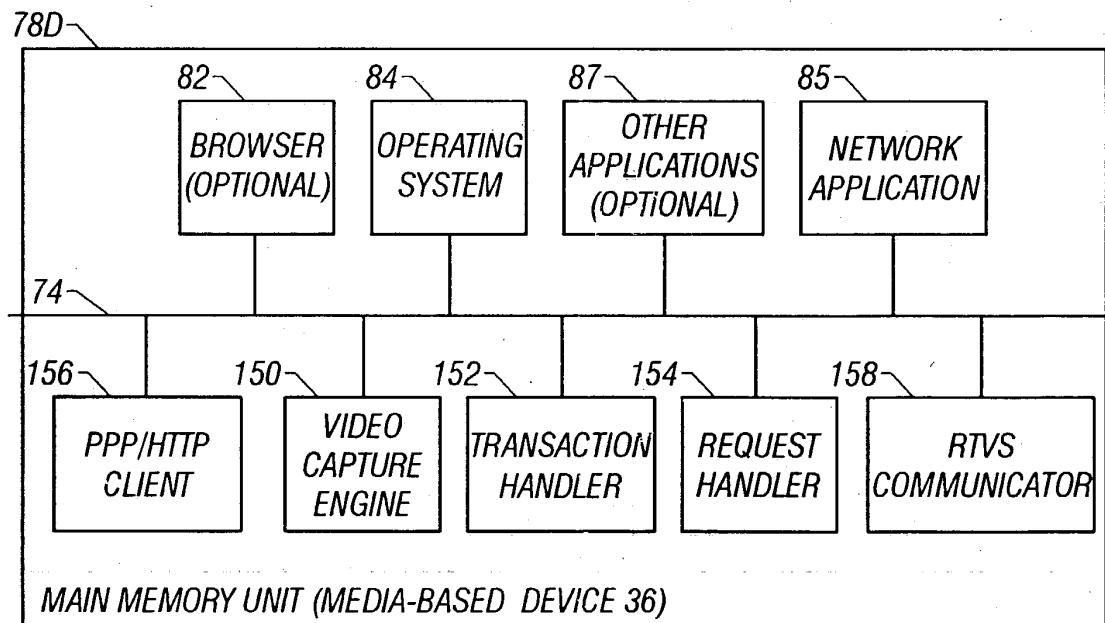


FIG. 4D

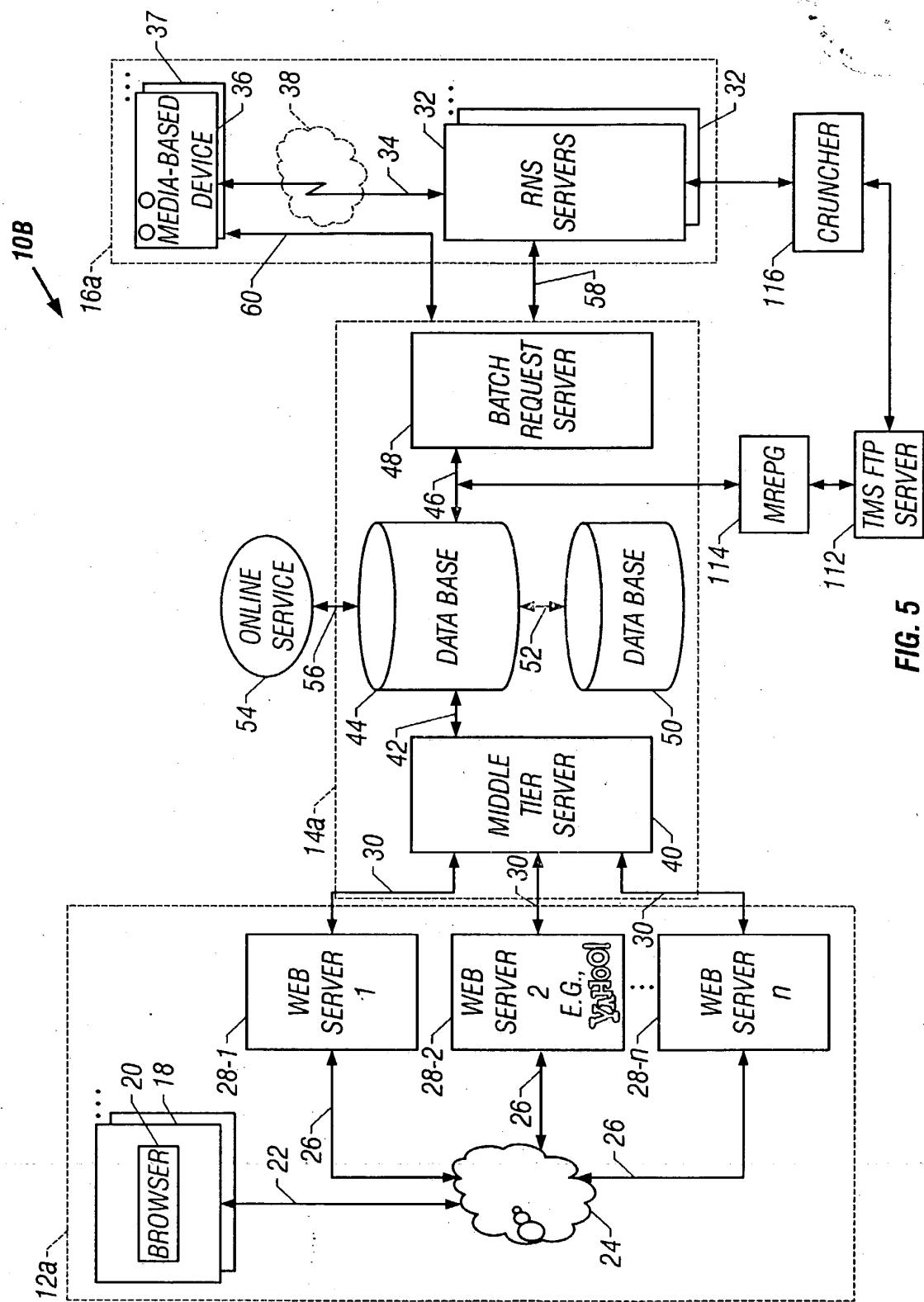


FIG. 5

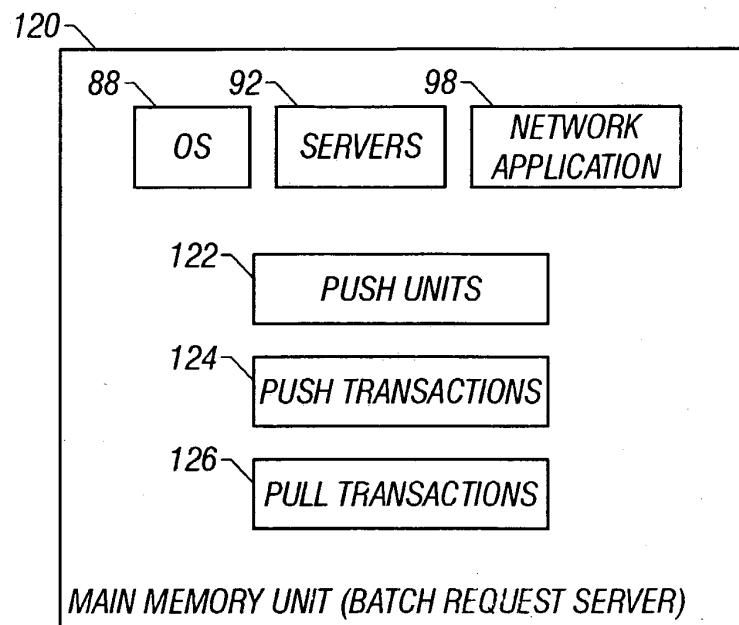


FIG. 6

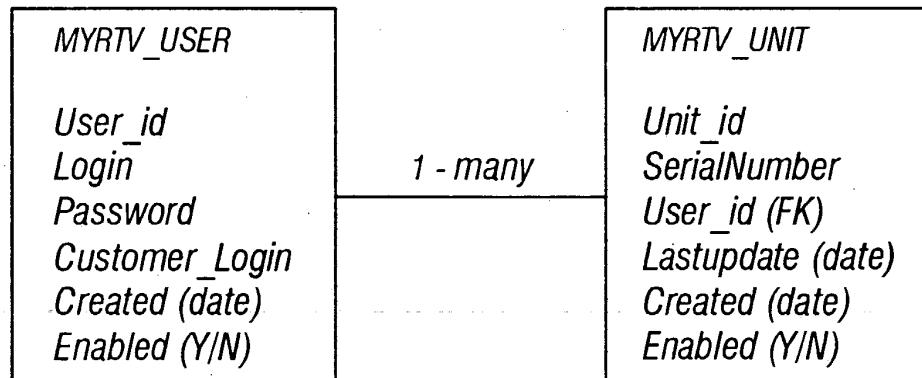


FIG. 7

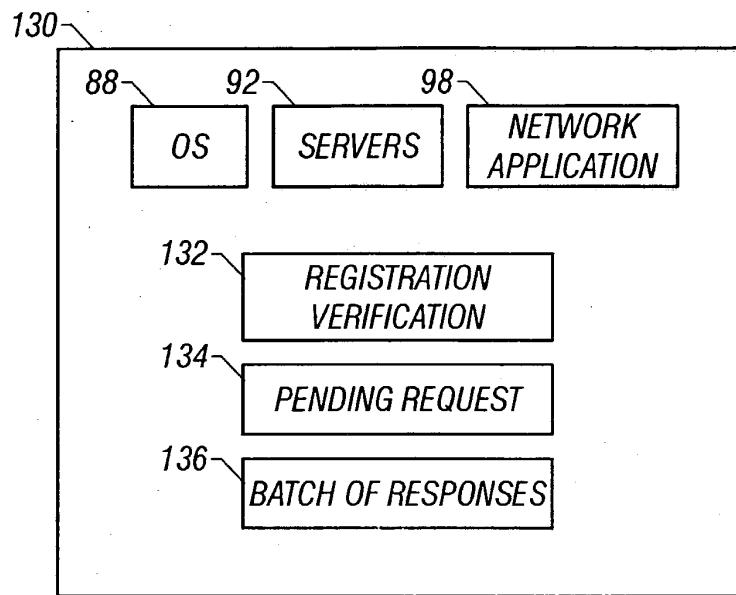


FIG. 8

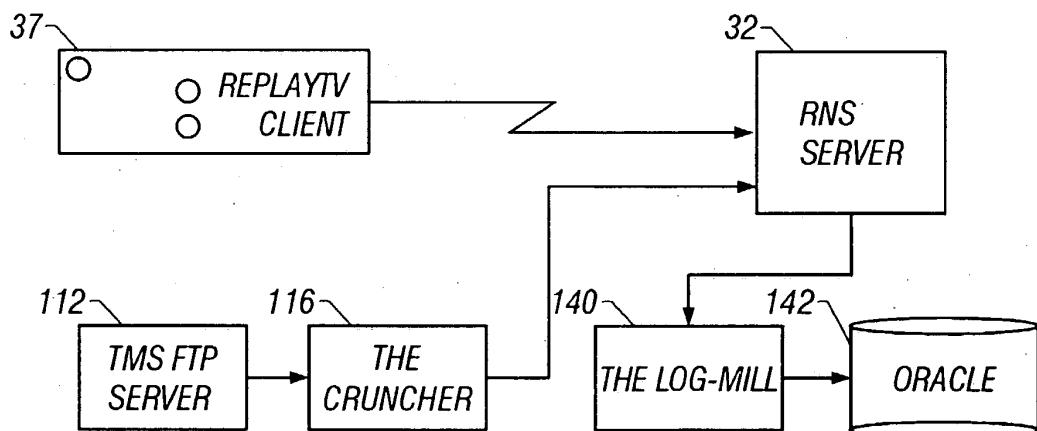
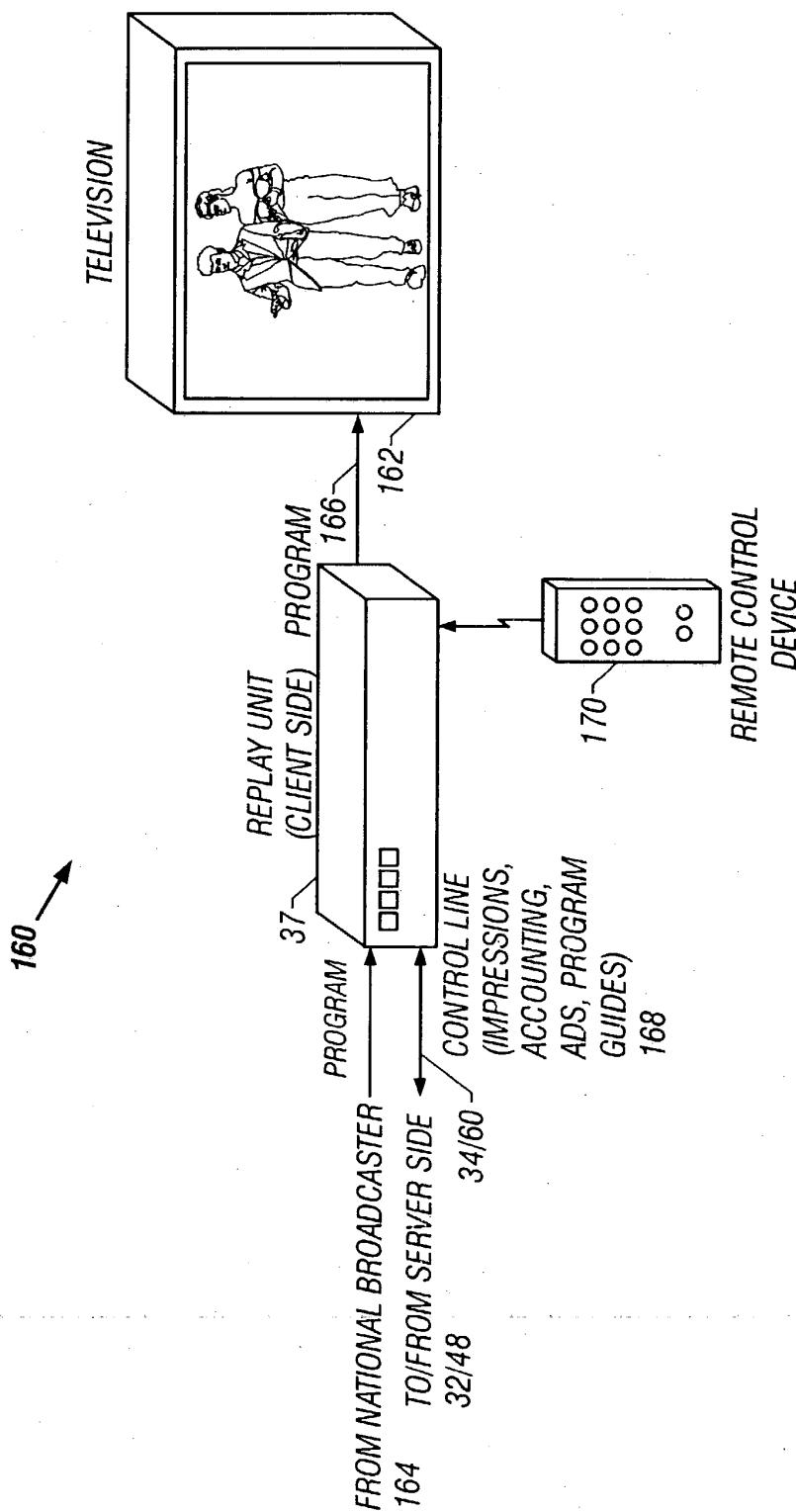


FIG. 9

**FIG. 10**

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Title: Method & System for Remote Television

Replay Control

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180~

**my r replaytv**

*Marketing/promotional information*

---

user name:  182     

password:  184

I forgot my password

---

Are you a new user to the myreplaytv webase?  Register

---

Help Contact us

FIG. 11

Preferences Help Logout

Channel Guide Replay Guide Find Shows Manual Record

## Channel Guide

Today 03/06 ▽

	6 pm ▽	0 OXYGEN ▽	GO
195	197	196	192
194			
198			
200			
202			
204			
206			
208			
190			

**Tue 3/06**

1 204	6:00 PM	6:30 PM	7:00 PM
0 OXYGEN	An Officer and a Gentleman		
1 IN1	Me, Myself & Irene		Scary Movie
2 KTVU	6 O'Clock Ne...	Spin City	Seinfeld
3 LOOR003	Local Origination		Local Origination
4 KRON	NewsCenter 4 at 6		Frasier
5 KPIX	CBS News	Channel 5 Ey...	Evening Maga...
6 KICU	Home Improve...	The Nanny	Family Feud
7 KGO	ABC 7 News at 6pm		Jeopardy!
8 KTSF	TV Patrol	Balita...	Little Saigo
9 KQED	Zoboomafoo	Nightly Busi...	The NewsHour With Jim Le...
10 KTEH	BBC World Ne...	French Field...	Antiques Roa...
11 TVGOS	TV Guide		EastEnders
12 KBHK	The Simpsons	3rd Rock Fro...	Friends
13 KBWB	The Drew Car...	Divorce Cour...	Power of Att...
14 KDTV	Noticias 14	Noticiero Un...	Carita de Angel

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FIG. 12A

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Replay Control

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View Description	2 KTVU ▽	4 PM ▽	1-15 ▽
Record	◦ 4 KRON	5 PM	16-30
Record all episodes	◦ Record future episodes ◦◦	SAT 8/19	31-45
Record + change options	◦ Record + change options	SUN 8/20	46-60
Find all episodes	◦ Find all episodes	MON 8/21	61-75
Close	◦ Why can't I record?	TUE 8/22	76-90
	◦ Close	9 KQED	91-105
		WED 8/23	10 PM
		10 KDTV	11 PM
		FRI 8/25	12 AM
		212 ↘	121-145
		214 ↘	146
		216 ↘	
View Description	222 ↘	222 ↘	
Find all episodes		11 KICU	
Turn off recording		12 KBHK	
Change record options		13 KBWB	
Close	220 ↘	14 CNN	
		15 DISN	
		16 QV	

FIG. 12B

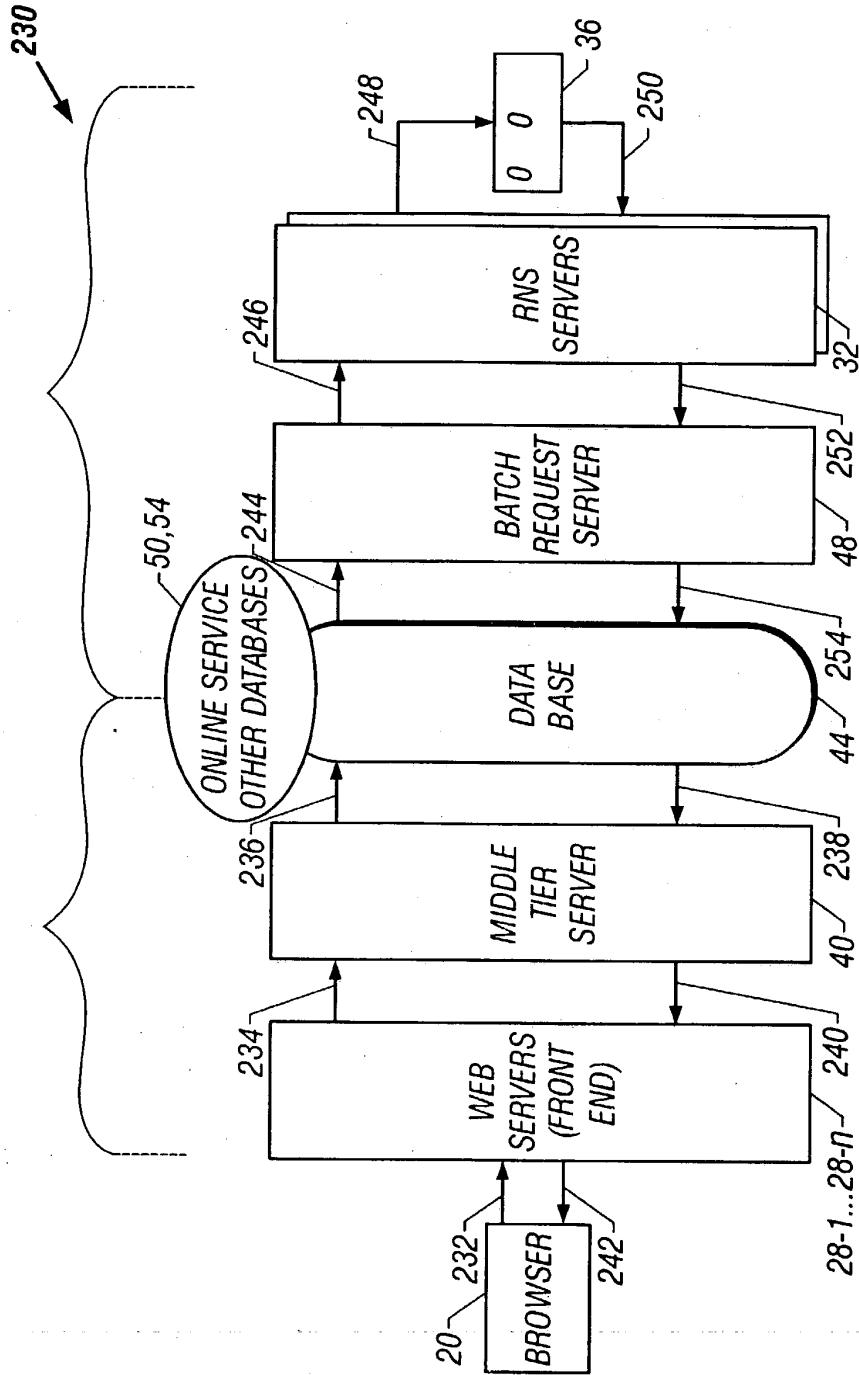
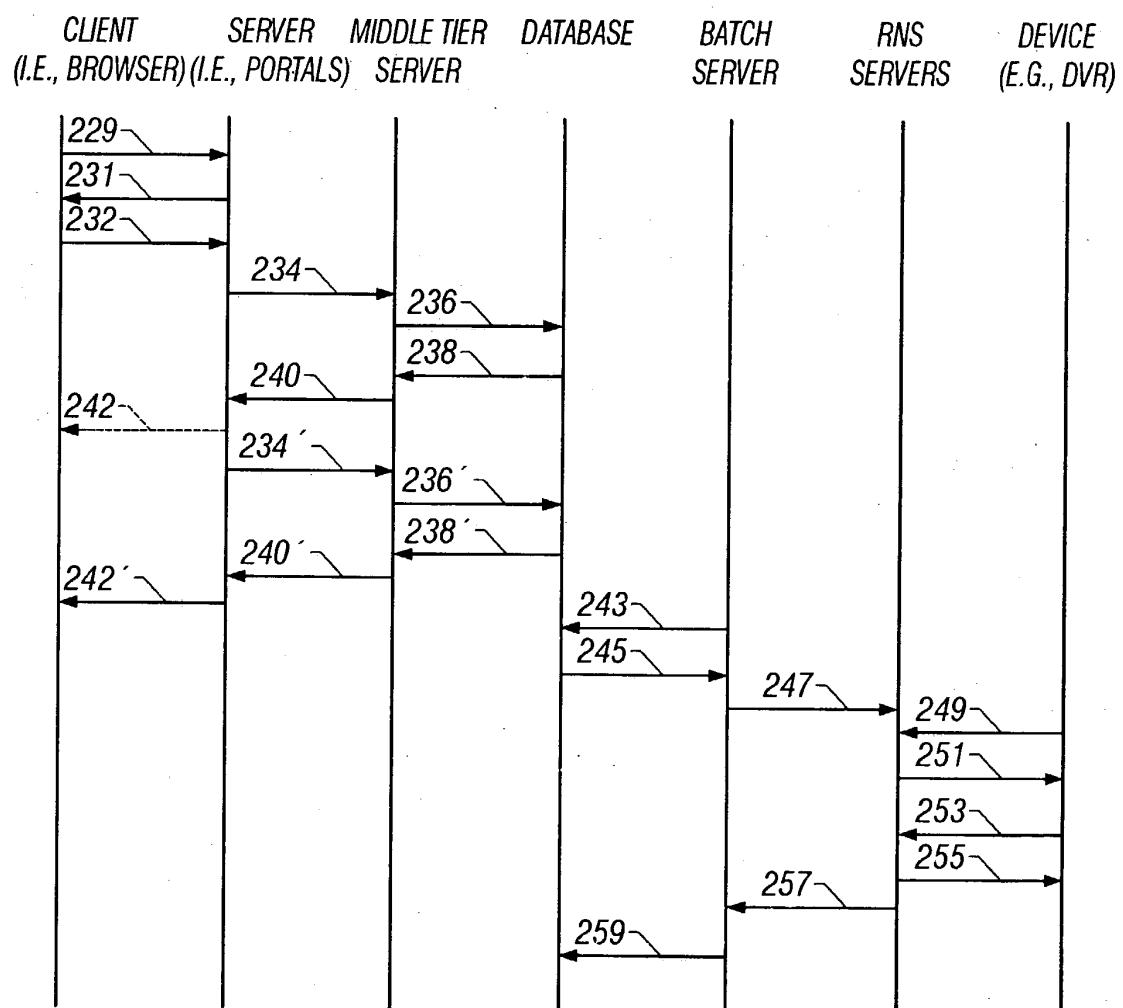


FIG. 13A

SEQUENCE DIAGRAM**FIG. 13B**

API Routine	Function
<i>CreateAccount</i>	<i>Creates an account for a new user based on the information received</i>
<i>Login</i>	<i>Tries to authenticate a user based on the input username and password combination</i>
<i>GetProfile</i>	<i>Returns the profile of the user and his units based on his userid</i>
<i>AddRequest</i>	<i>Adds a request to the unit's list of pending requests based on a set of request parameters, and returns the full status of the unit and of the pending requests, including those for recording specified show(s) and deleting recorded show(s)</i>
<i>DeleteRequest</i>	<i>Delete a request from the user list of pending requests</i>
<i>GetReplayGuide</i>	<i>Returns the Replay Guide of the unit as saved in the appropriate database for the specified unit</i>
<i>GetChannelLineUp</i>	<i>Returns the channel lineup of the unit based on the unit's setting</i>
<i>ChangePassword</i>	<i>Lets the user changes his password</i>
<i>GetEPG</i>	<i>Returns the current electronic program guide for the unit based on the settings of the unit</i>
<i>ShowGuide</i>	<i>Returns detailed information about a specified show or search show details for particular shows based on criteria given as parameters</i>

FIG. 14

API Routine	Input Parameters	Output Files (Corresponding XML elements)
CreateAccount	firstname, lastname, address1, address2, city, state, zipcode, serialnumber, login, password, creator	ACCOUNT.XML REPLAYERROR.XML
Login	login, password	ACCOUNT.XML REPLAYERROR.XML
GetProfile	userid	PROFILE.XML (USERINFO, UNITINFO-1) REPLAYERROR.XML
AddRequest	userid, unitid, reqtype(none, show, theme, update) <u>reqtype=show:</u> showtype(single, repeat, manual single, manual repeat), headendid, tmsid, device, starttimegmt, name, durationinminutes, inputsource, quality, guaranteedrecord, numepisodes, weekdayflags, earliststartminutes, showguarminutes <u>reqtype=theme:</u> searchterm, searchflags, suzukiid, durationinminutes, quality, guaranteedrecord <u>reqtype=update:</u> updatetype(deleteshow, preserveshow, deletechannel), channelid, showid	UNITSTATUS.XML (UNITINFO, REQUESTSTATUS-1) REPLAYERROR.XML <i>*Note: REQUESTSTATUS Result = (PENDING, SENT, SUCCESS, GENERAL FAILURE, SCHEDULE FAILURE, ROOM FAILURE)</i>
DeleteRequest	userid, unitid, requestid	DELETERESULT.XML REPLAYERROR.XML
GetReplayGuide	userid, unitid	GUIDE.XML (REPLAYCHANNEL-1) REPLAYERROR.XML <i>*Note: REPLAYCHANNEL Type = (SINGLE, SINGLEMANUAL, REPEAT, REPEATMANUAL, THEME, THEMEEACT, ZONE)</i>
GetChannelLineUp	userid, unitid	CHANNELLINEUP.XML (CHANNEL-1) REPLAYERROR.XML
ChangePassword	userid, currentpassword, newpassword	ACCOUNT.XML REPLAYERROR.XML
GetEPG	userid, unitid, starttimegmt, durationinminutes, startchannel, channelcount	XML file based on tvguide.dtd & tvprograms.dtd REPLAYERROR.XML
ShowGuide	userid, unitid, query, start, count, levelofdetail <i>*Note: query keywords include actor, advisory, desc, mpaa rating, title, etc.</i>	XML file based on tvguide.dtd & tvprograms.dtd REPLAYERROR.XML

FIG. 15

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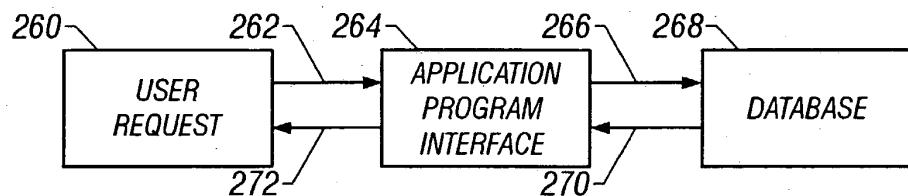


FIG. 16A

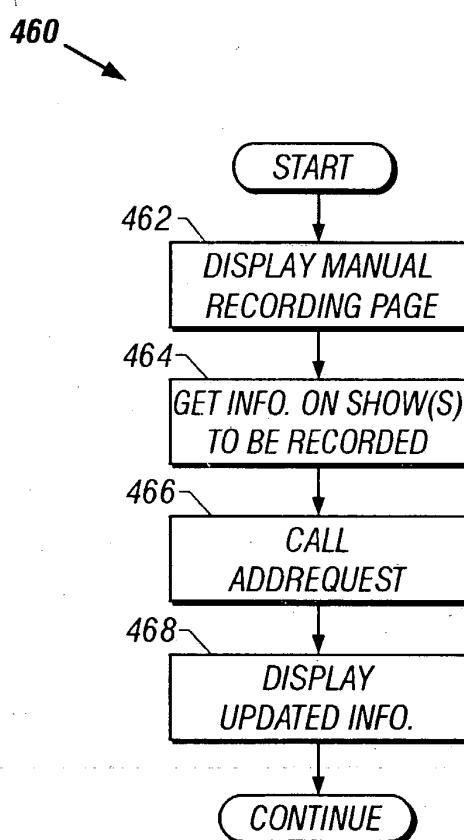


FIG. 25

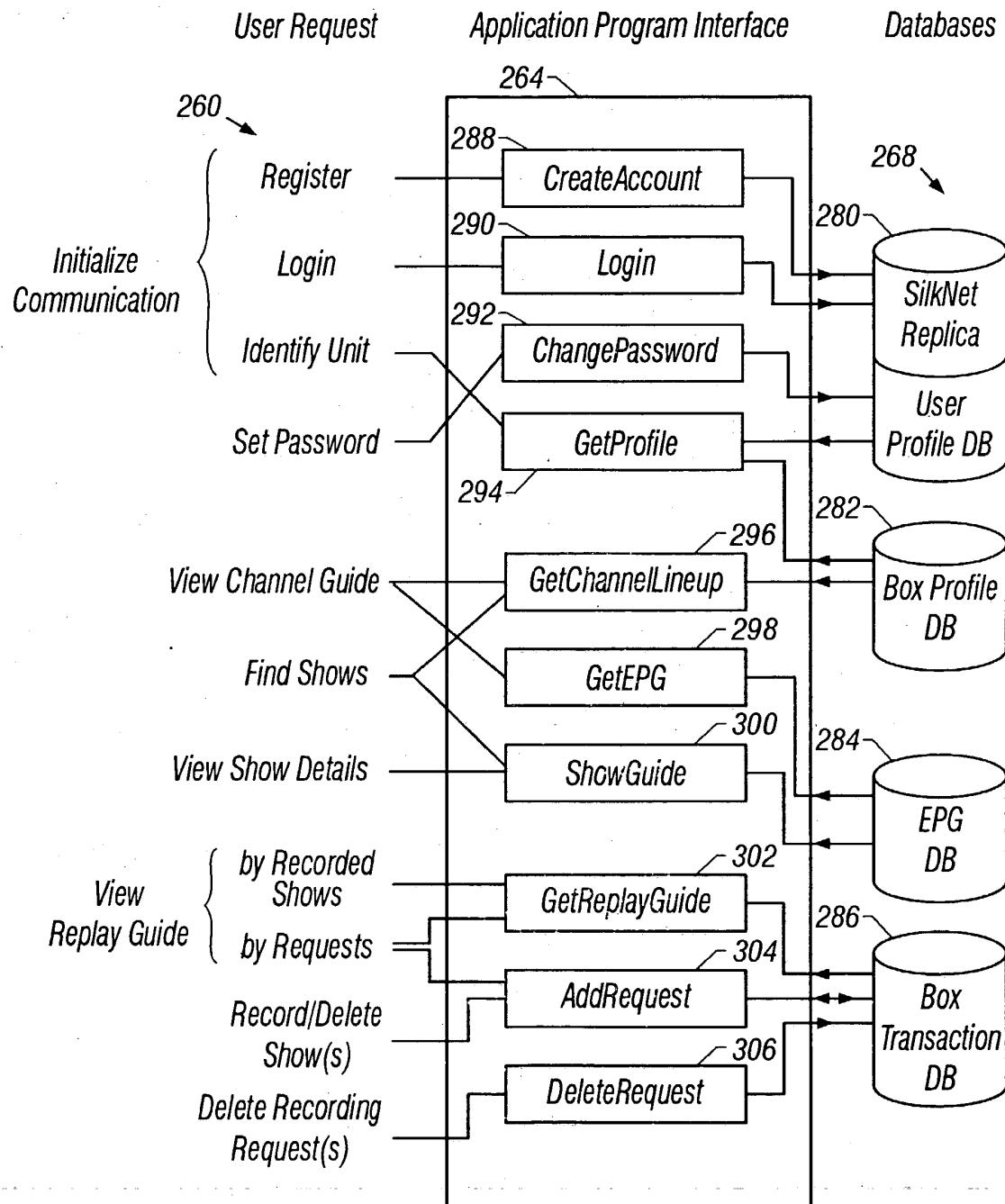
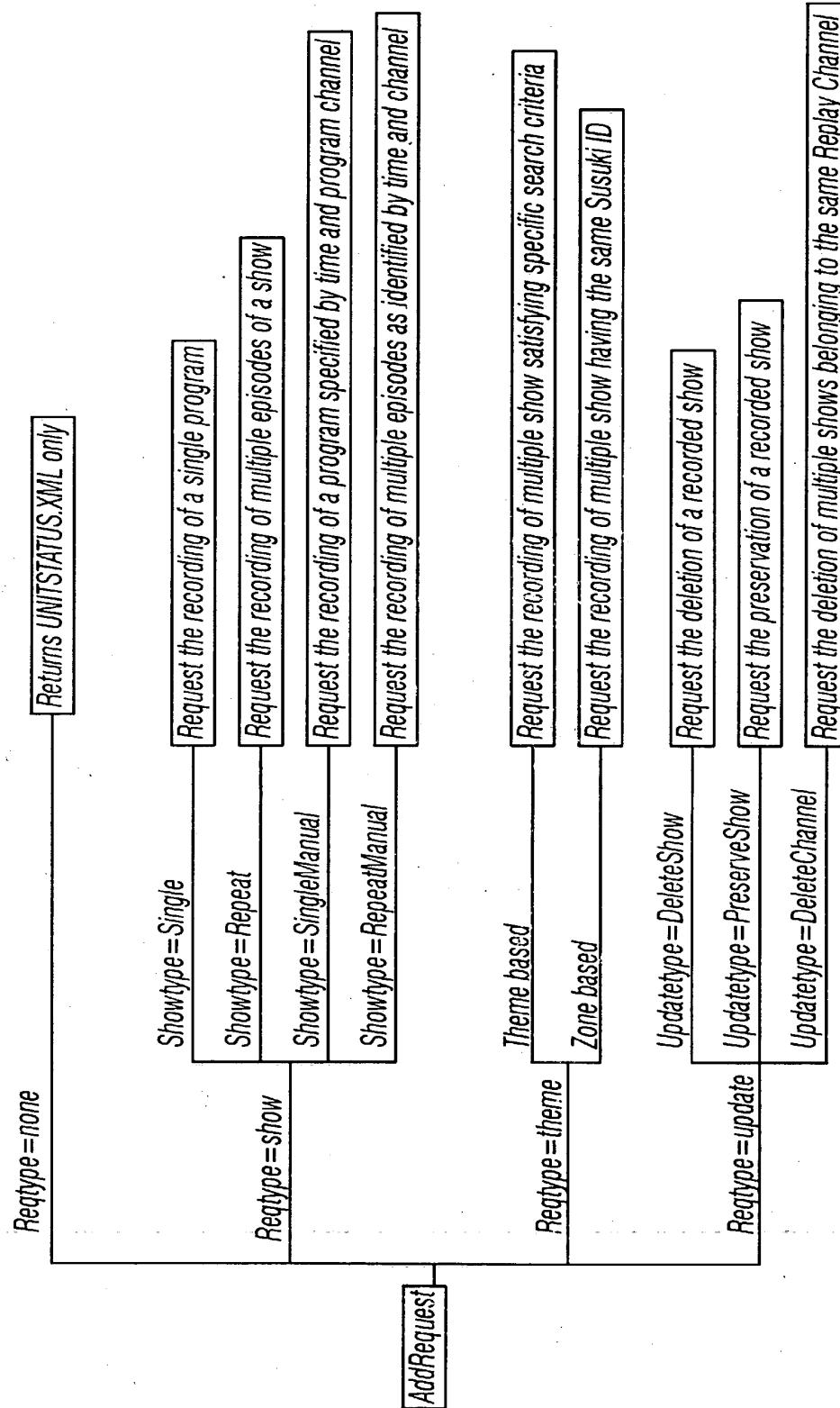


FIG. 16B



**FIG. 17**

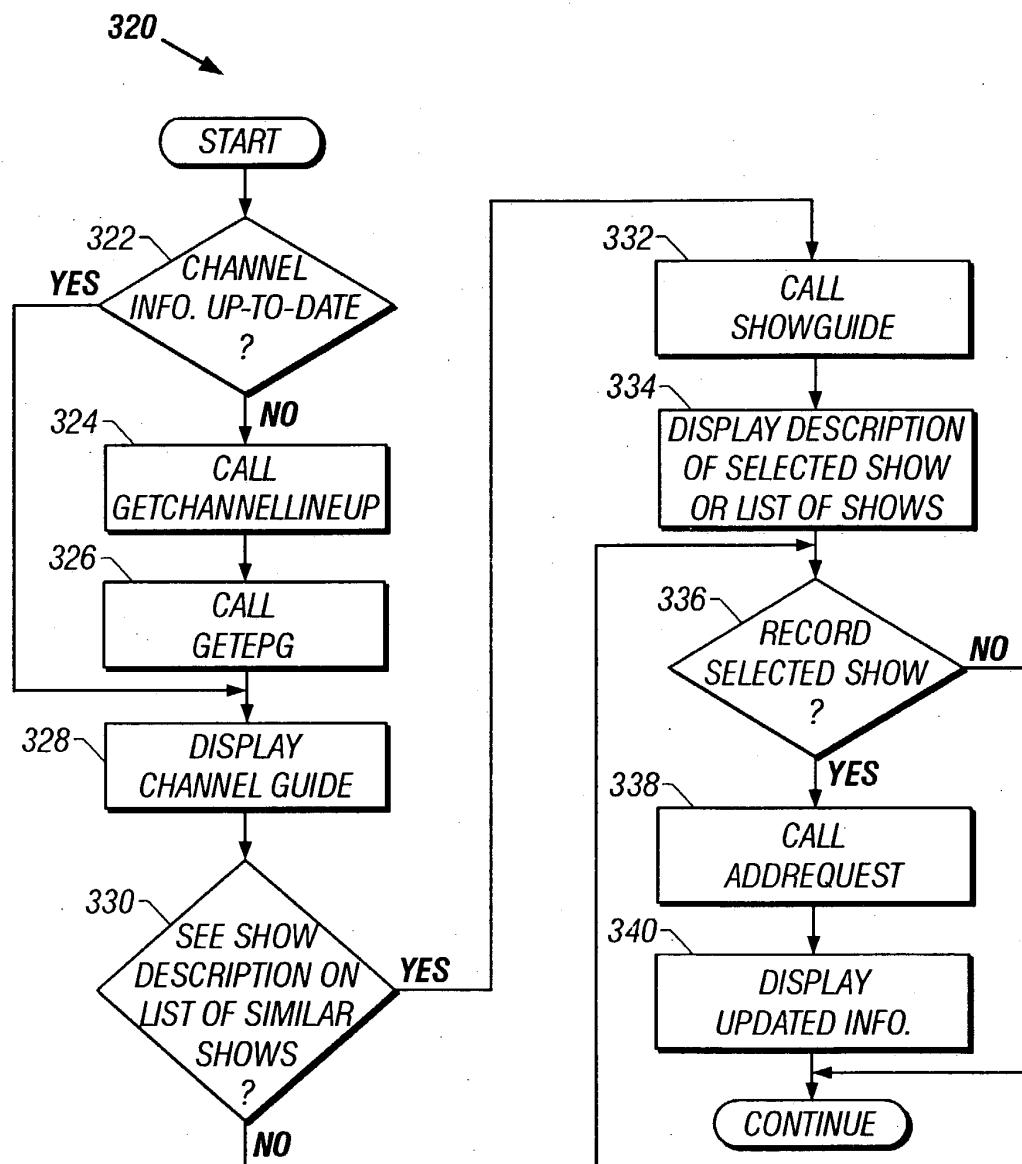


FIG. 18

my  replaytv

Preferences Help Logout

Channel Guide Replay Guide Find Shows Manual Record

## Replay Guide

Replay Shows Replay Channels 350

Review and edit your one time and recurring Replay TV requests

 [Delete Selected Channels](#)

Channel	Details	Status	Request Date
<input type="checkbox"/> A Fistful of Dollars	This single record Replay channel was scheduled to record A Fistful of Dollars from Channel 21(TBS) on Sun, 02/18 at or around 7:00AM - 9:00AM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.		02/18
<input type="checkbox"/> Blown Away	This single record Replay channel was scheduled to record Blown Away from Channel 42(USAP) on Tue, 01/16 at or around 9:00PM - 11:30PM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.		01/16
<input type="checkbox"/> Cantonese News	This show-based Replay channel will continuously record the 1 most current episode(s) of Cantonese News occurring every (Sun, Mon, Tue, Wed, Thu, Fri, Sat) on Channel 8(KTSF) at or around 8:00PM - 9:00PM. Guaranteed at EXTENDED quality.		02/28
<input type="checkbox"/> Captain January	This single record Replay channel was scheduled to record Captain January from Channel 49(AMC) on Tue, 01/09 at or around 3:30AM - 5:00AM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.		01/09

FIG. 19A

my  replayTV		Channel Guide	Replay Guide	Find Shows	Manual Record
Replay Guide		350			
Replay Shows   Replay Channels		Delete Selected Channels			
Review and edit recordings saved to your Replay TV unit					
Channel	Show Title/Episode	Date/Time	Station	Duration	Size
A Fistful of Dollars	<input type="checkbox"/> A Fistful of Dollars	02/18 7:00AM	21 TBS	(2h)	6.46%
Blown Away	<input type="checkbox"/> Blown Away	01/16 9:00PM	42 USAP	(2h 30m)	8.07%
Captain January	<input type="checkbox"/> Captain January	01/09 3:30AM	49 AMC	(1h 30m)	4.84%
Firewalker	<input type="checkbox"/> Firewalker	02/27 8:00PM	21 TBS	(2h)	6.46%
On Deadly Ground	<input type="checkbox"/> On Deadly Ground	01/07 9:00PM	4 KRON	(2h)	6.46%
Platoon	<input type="checkbox"/> Platoon	02/04 8:00PM	37 TNTP	(2h 30m)	8.07%
The Bridge on the River Kwai	<input type="checkbox"/> The Bridge on the River Kwai	12/24 8:00AM	42 USAP	(3h 30m)	11.30%
The Little Princess	<input type="checkbox"/> The Little Princess	12/26 4:15AM	49 AMC	(1h 45m)	5.65%
The Trouble with Harry	<input type="checkbox"/> The Trouble with Harry	12/18 1:05PM	49 AMC	(1h 55m)	6.19%
Welcome to ReplayTV	<input type="checkbox"/> Welcome to ReplayTV	09/08 10:49AM		(15m)	2.42%

**FIG. 19B**

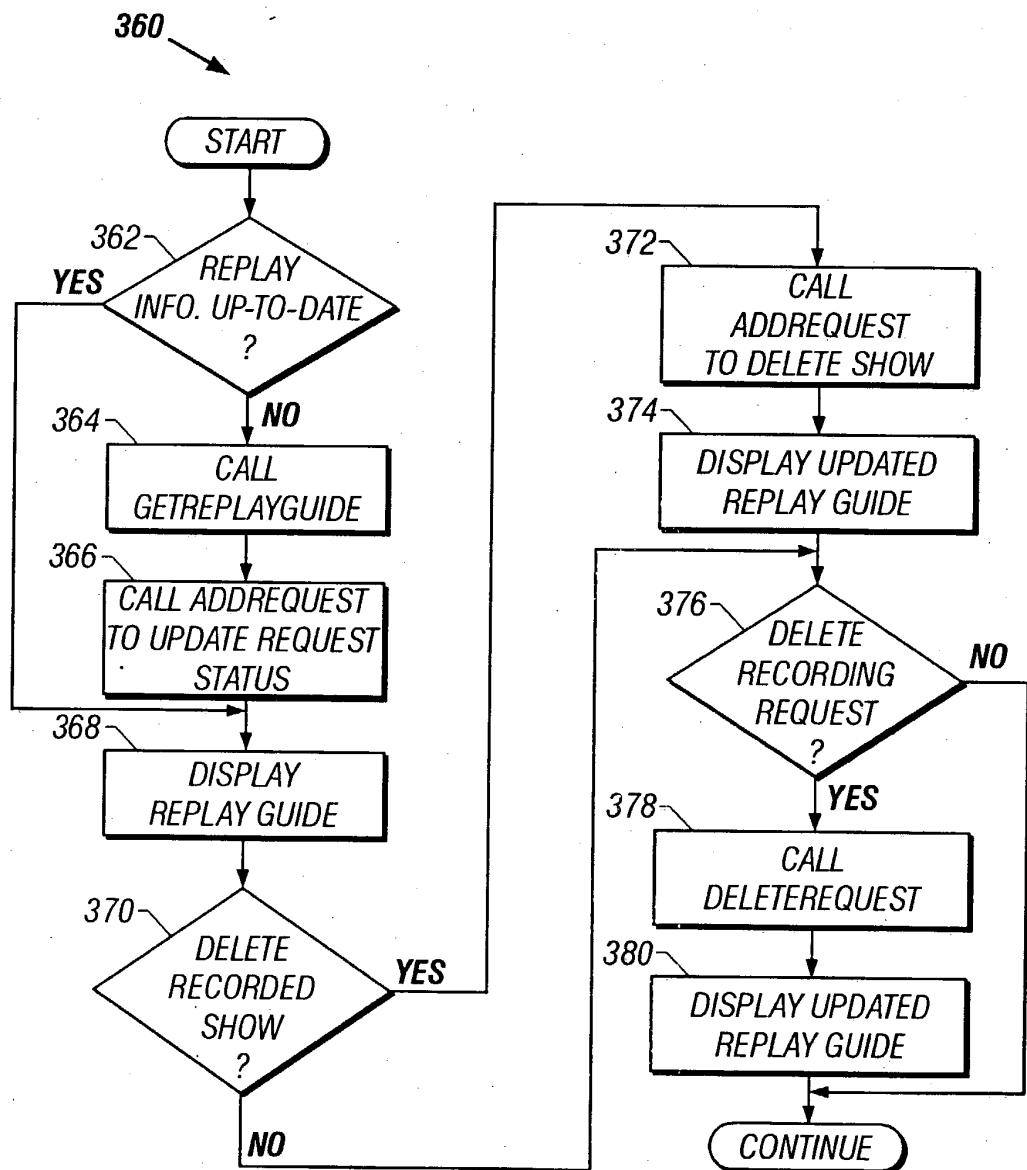


FIG. 20

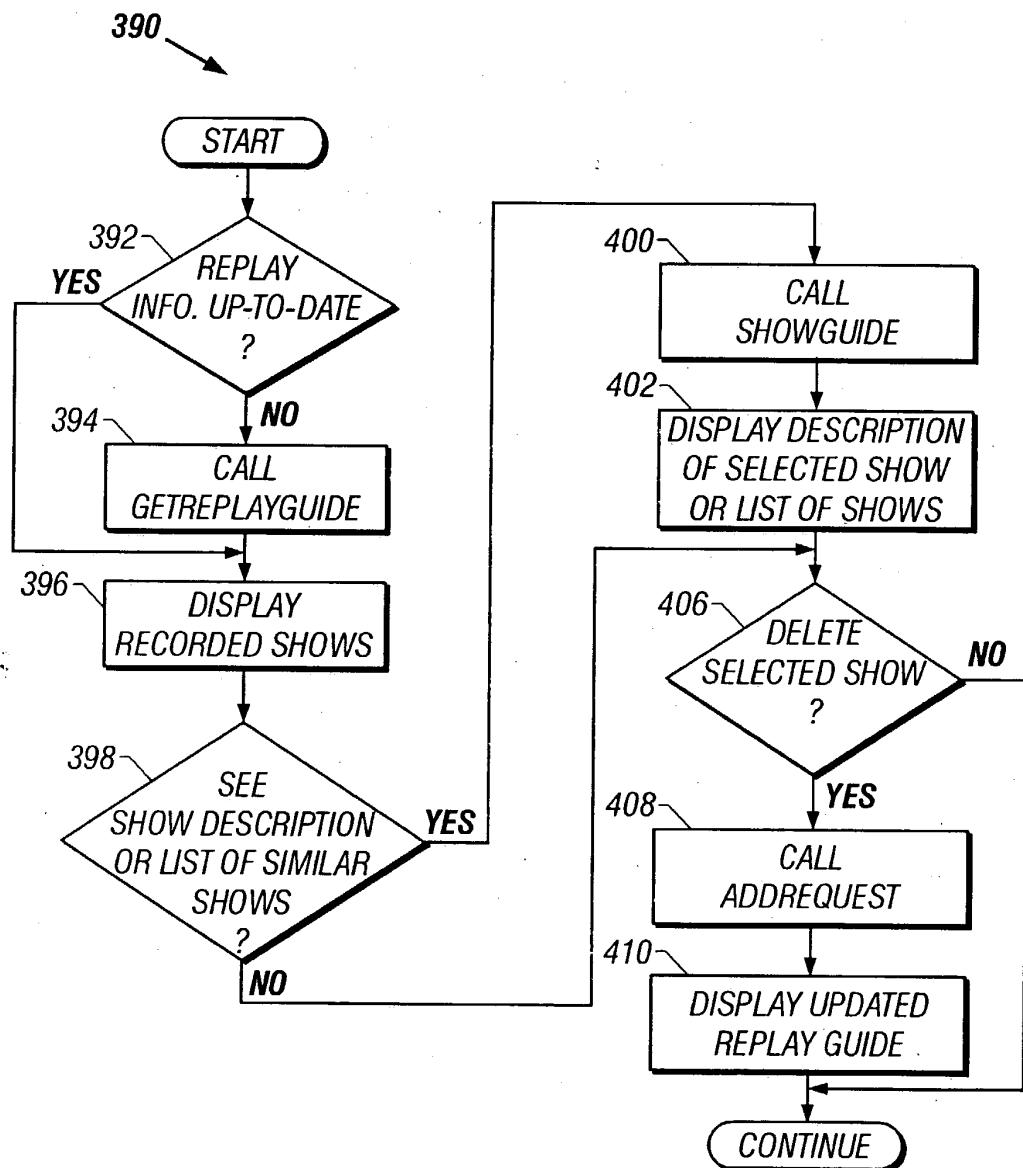


FIG. 21

**my r replaytv**

Channel Guide | [Replay Guide](#) | [Find Shows](#) | [Manual Record](#)

[Preferences](#) | [Help](#) | [Logout](#)

## Find Shows

Find:

in these categories:

Show Titles    Actors  
 Descriptions    Directors

[Find Shows](#)

Enter the word or phrase that you wish to find.

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FIG. 22

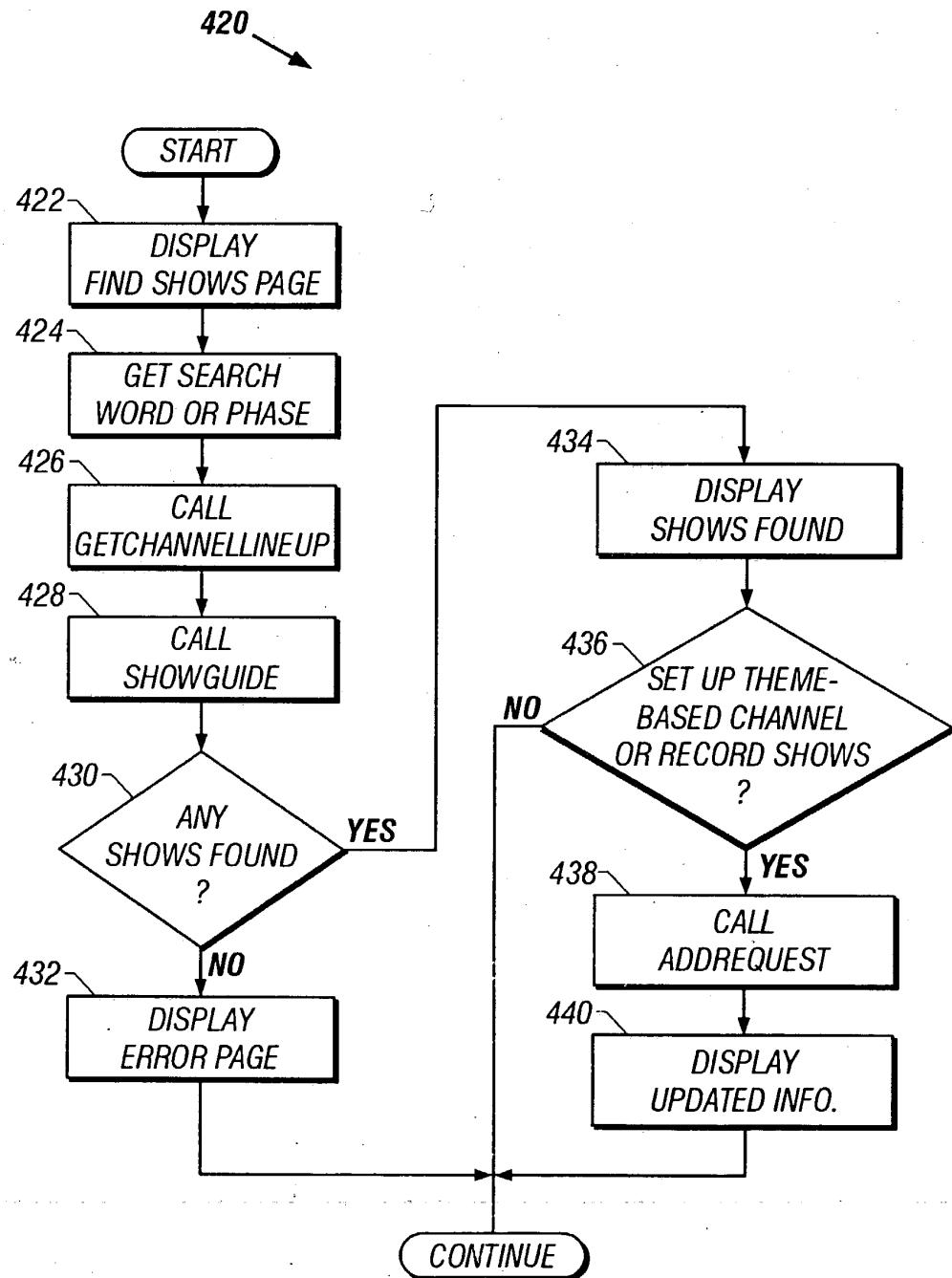


FIG. 23

<b>my r replaytv</b>		<a href="#">Preferences</a>	<a href="#">Help</a>	<a href="#">Logout</a>
		<a href="#">Channel Guide</a>	<a href="#">Replay Guide</a>	<a href="#">Find Shows</a>
<b>Manual Record</b>		<a href="#">Manual Record</a>		
<a href="#">Single Recording</a>		<a href="#">Repeat Recording</a>		
<b>Start Date</b>		<input type="text" value="Mar"/> <input type="button" value="▼"/>	<input type="text" value="7"/> <input type="button" value="▼"/>	<input type="text" value="2001"/> <input type="button" value="▼"/>
<b>Start Time</b>		<input type="checkbox"/> : <input type="checkbox"/> <input type="button" value="AM"/> <input type="button" value="▼"/>	}	
<b>End Time</b>		<input type="checkbox"/> : <input type="checkbox"/> <input type="button" value="AM"/> <input type="button" value="▼"/>	<i>Recording duration:</i>	
<b>Channel</b>		<input type="text" value="0 OXYGEN"/> <input type="button" value="▼"/>		
<b>Quality</b>		<input type="checkbox"/> <input type="button" value="Extended"/> <input type="button" value="▼"/>		
<b>Guaranteed</b>		<input type="checkbox"/> <input type="button" value="Yes"/> <input type="button" value="▼"/>	<a href="#">Submit Request</a>	
			450 ↗	
			<a href="#">Copyright Policy</a> <a href="#">Terms and Conditions</a> <a href="#">Privacy Policy</a> <a href="#">FAQ</a>	

**FIG. 24A**

my  replaytv

Channel Guide Find Shows Manual Record **Replay Guide**

Preferences Help Logout

**Manual Record**

Single Recording Repeat Recording

3h 45m available at medium quality  
as of last connection

Days  Mon  Tue  Wed  Thu  Fri  Sat  Sun

Start Time **7:58 PM**

End Time **11:02 PM**

Channel **4 KRON**

Quality **Standard**

Guaranteed **Yes**

**Submit Request**

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FIG. 24B

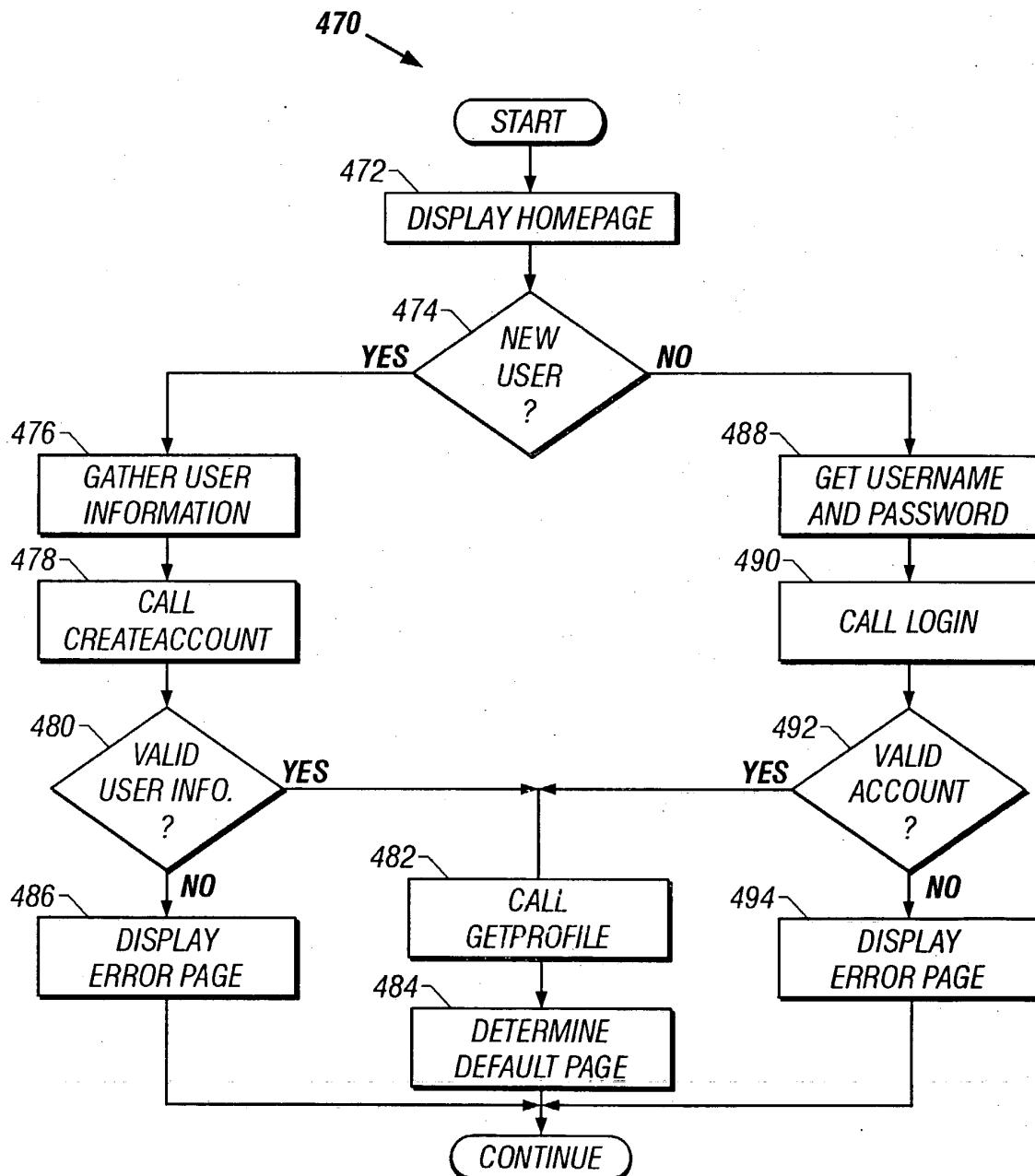


FIG. 26

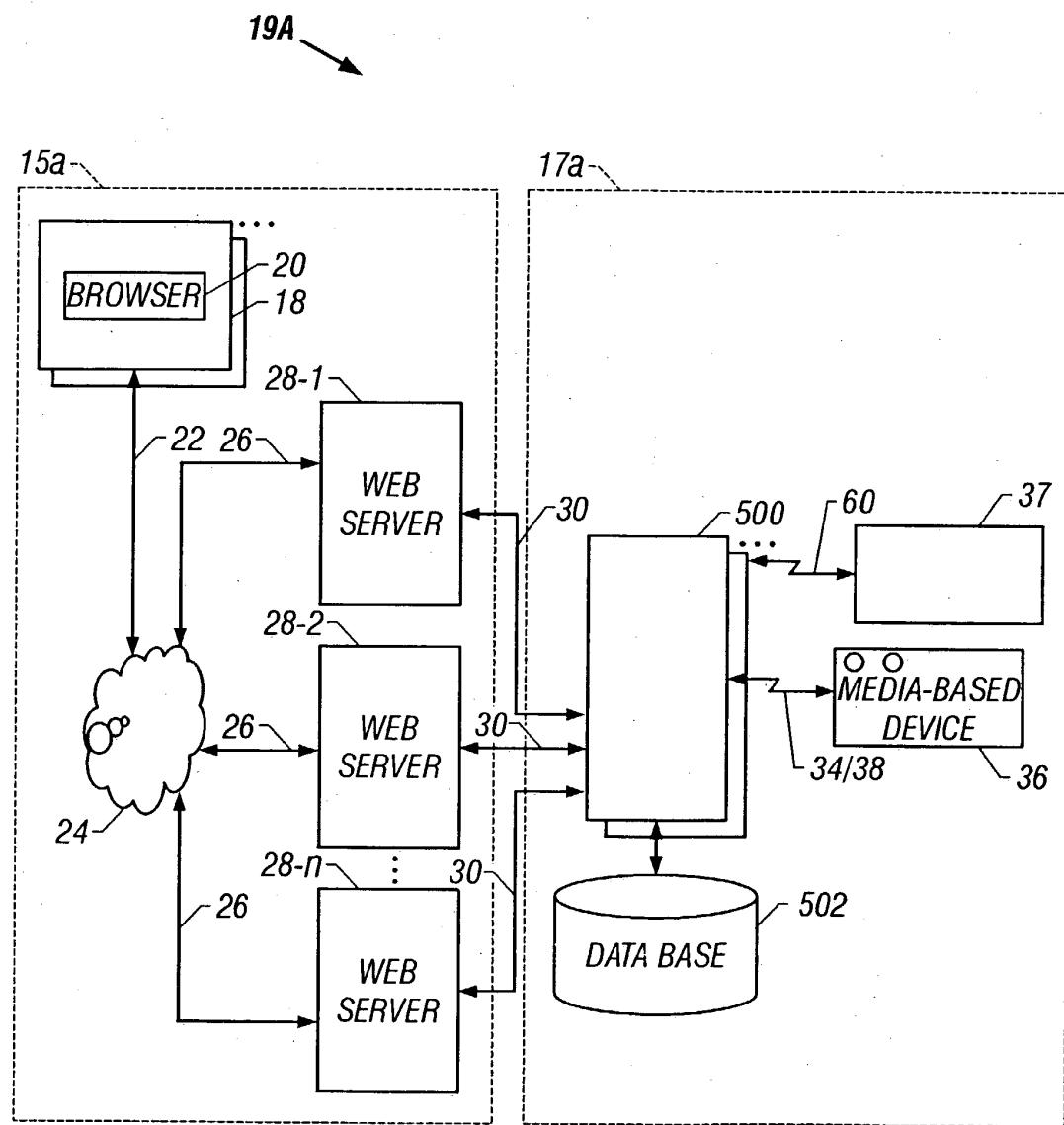


FIG. 27

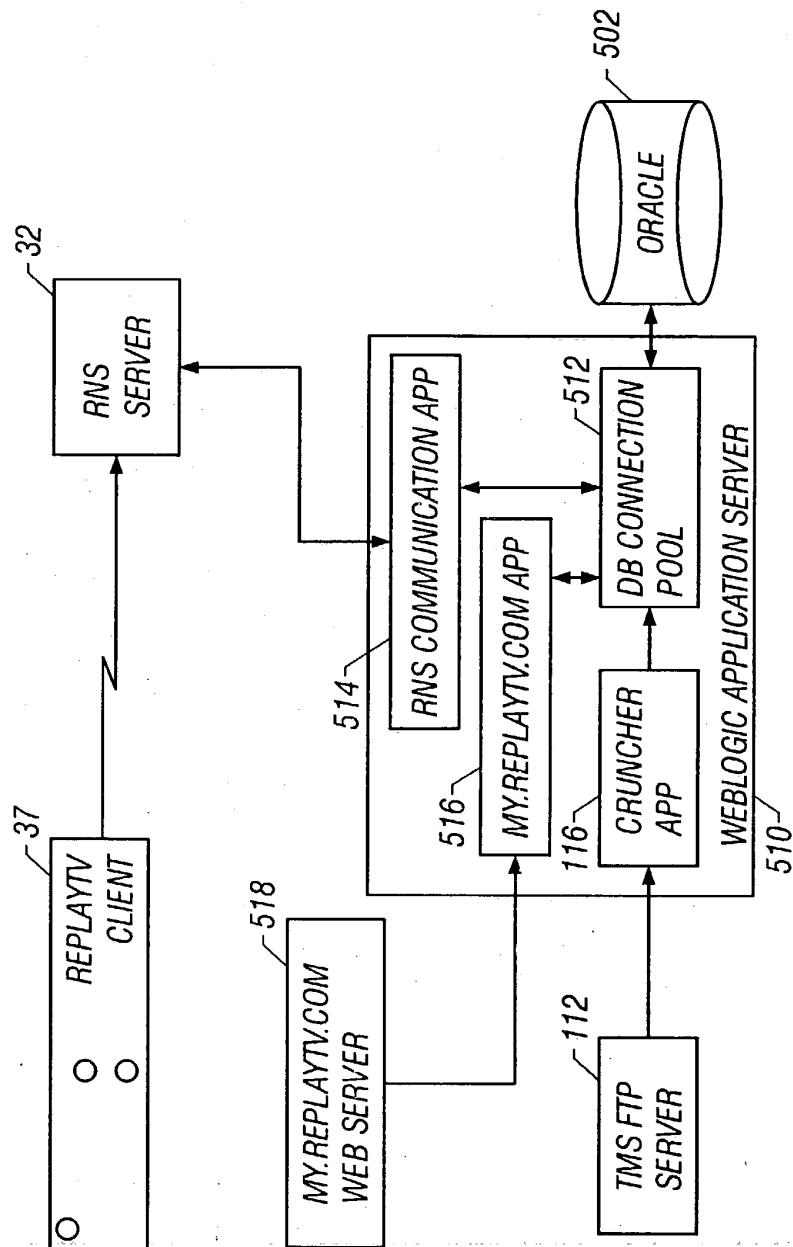


FIG. 28

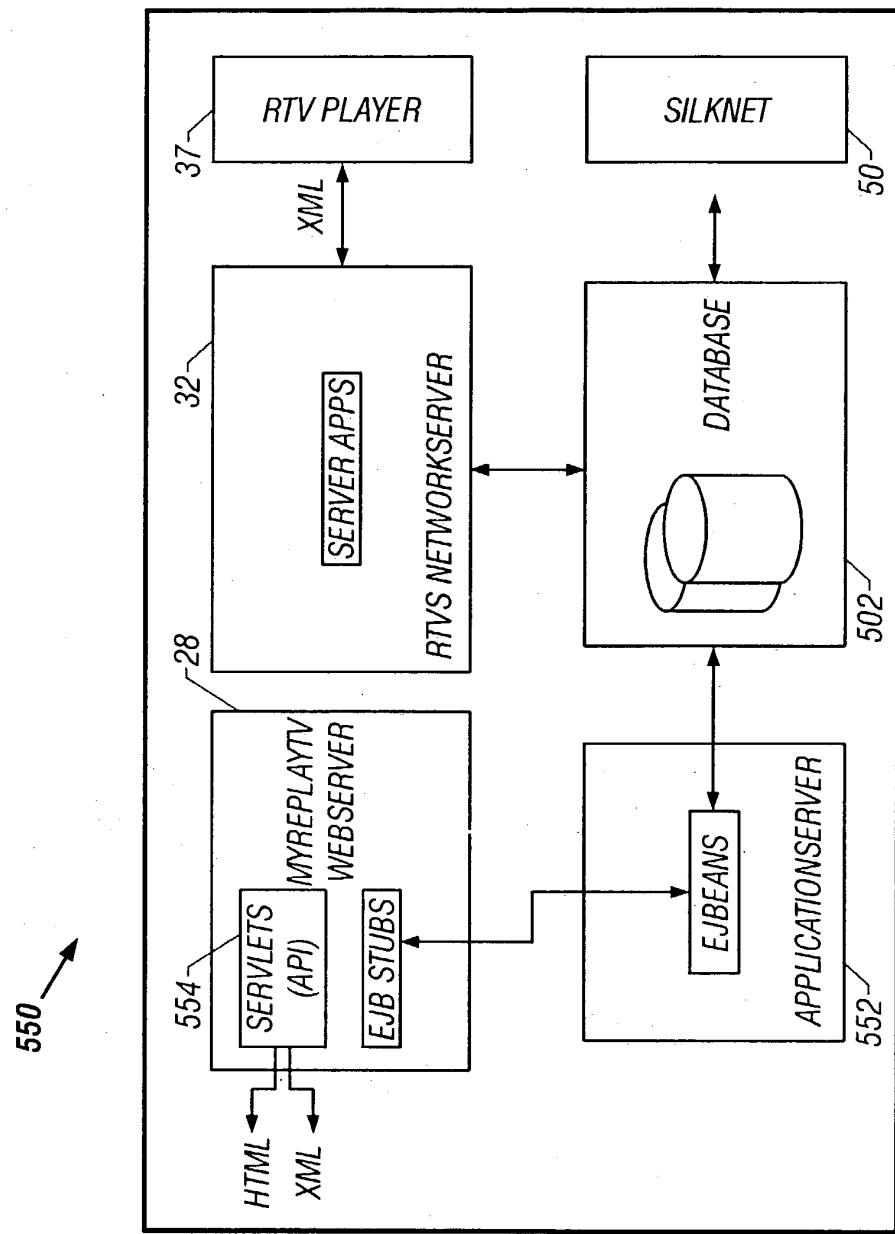


FIG. 29

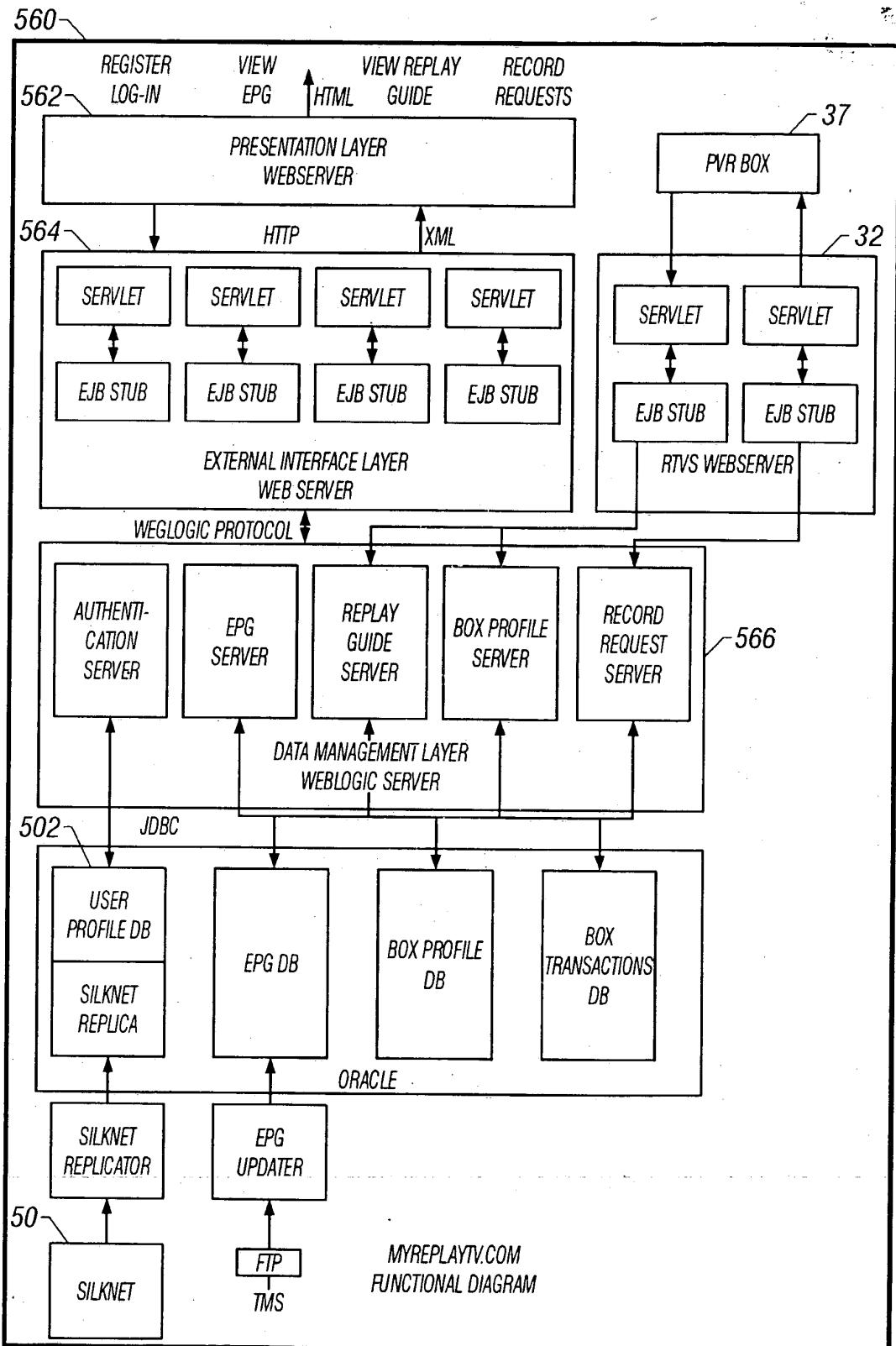
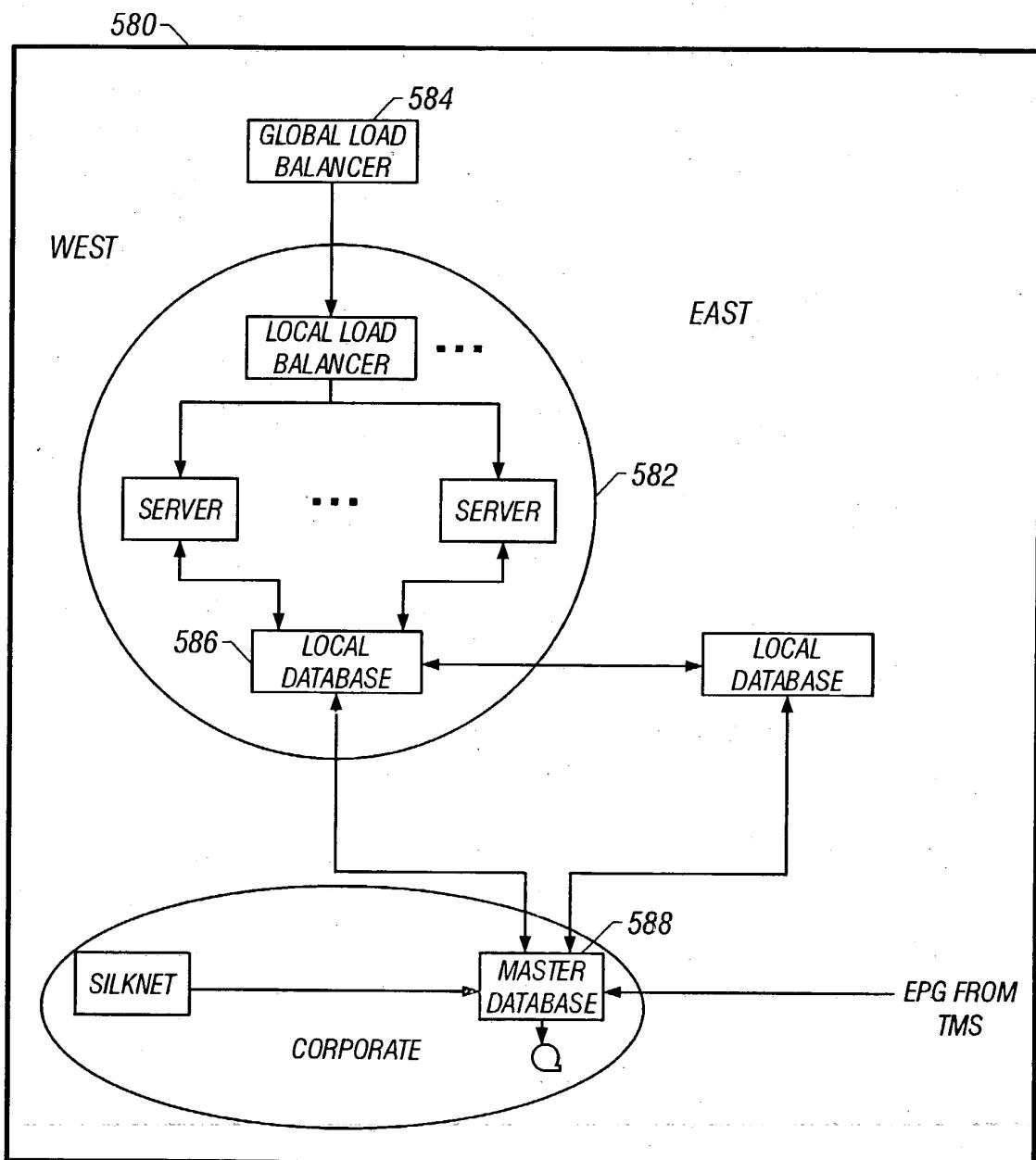


FIG. 30



**FIG. 31**